AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. **(Currently amended)** A composite dispersion which comprises;

a continuous phase comprising a resin[[,]]; and

a dispersed phase being directly bonded to the continuous phase and comprising a vulcanized rubber formed by vulcanizing an unvulcanized rubber,

wherein the continuous phase and the dispersed phase form an islands-in-an ocean structure,

the resin is a resin containing a vulcanization-activating agent, or a crosslinkable group-containing resin,

the vulcanization-activating agent comprises at least one member selected from the group consisting of an organic compound having at least two polymerizable unsaturated bonds per molecule, and a maleimide-series compound, and

the crosslinkable group-containing resin is a thermoplastic resin having an unsaturated bond and comprising at least one member selected from the group consisting of a polyamide-series resin, a polyester-series resin, a polyoxyalkylene-series resin, a polythioether-series resin, a polycarbonate-series resin, a polyimide-series resin, a polysulfone-series resin, a polyurethane-series resin, a polyolefin-series resin, a halogen-containing resin, a styrenic resin, a (meth)acrylic resin, and a thermoplastic elastomer.

2. **(Canceled)**

3. **(Currently Amended)** A composite dispersion according to ~~claim 2,~~ claim 1, wherein said composite dispersion comprises the thermoplastic resin having an unsaturated bond which is at least one of the following resin (i) or (ii):

(i) a resin produced by a reaction of a polymerizable compound having a reactive group (A) and an unsaturated bond with a thermoplastic resin having a reactive group (B) which is reactive to the reactive group (A), or

(ii) a thermoplastic resin into which an unsaturated bond is introduced by copolymerization or copolycondensation.

4. **(Currently Amended)** A composite dispersion according to ~~claim 2,~~ claim 1, wherein the thermoplastic resin having an unsaturated bond has an unsaturated bond in a proportion of 0.01 to 6.6 mol relative to 1 kg of the thermoplastic resin.

5. **(Original)** A composite dispersion according to claim 1, wherein the resin comprises at least one member selected from the group consisting of a polyamide-series resin, a polyester-series resin, a poly(thio)ether-series resin, a polycarbonate-series resin, a polyimide-series resin, a polysulfone-series resin, a polyurethane-series resin, a polyolefin-series resin, a halogen-containing resin, a styrenic resin, a (meth)acrylic resin, and a thermoplastic elastomer.

6. **(Original)** A composite dispersion according to claim 1, wherein the resin comprises at least one member selected from the group consisting of an aliphatic polyamide-series resin, an aromatic polyester-series resin, a polyphenylene ether-series resin, and a polysulfide-series resin.

7. **(Original)** A composite dispersion according to claim 1, wherein the resin has at least two atoms on the average per molecule, and each of atoms is selected from a hydrogen atom and/or a sulfur atom and has an orbital interaction energy coefficient S of not less than 0.006,

wherein the orbital interaction energy coefficient S is represented by the following formula (1):

$$S=(C_{HOMO,n})^2/|Ec\text{-}EHOMO,n|+(C_{LUMO,n})^2/|E_c\text{-}E_{LUMO,n}| \quad (1)$$

in the formula, each of E_c, $C_{HOMO,n}$, $E_{HOMO,n}$, $C_{LUMO,n}$, and $E_{LUMO,n}$ represents a value calculated by a semiempirical molecular orbital method MOPACPM3, E_c representing an orbital energy (eV) of a radical of a radical-generating agent, $C_{HOMO,n}$ representing a molecular-orbital coefficient of the highest occupied molecular orbital (HOMO) of an n-th hydrogen atom and/or sulfur atom constituting a basic unit of the resin, $E_{HOMO,n}$ representing an orbital energy (eV) of the HOMO, $C_{LUMO,n}$ representing a molecular-orbital coefficient of the lowest unoccupied molecular orbital (LUMO) of the n-th hydrogen atom and/or sulfur atom constituting the basic unit of the resin, and $E_{LUMO,n}$ representing an orbital energy (eV) of the LUMO.

8. **(Original)** A composite dispersion according to claim 1, wherein the vulcanized rubber comprises at least one member selected from the group consisting of a diene-series

rubber, an olefinic rubber, an acrylic rubber, a fluorine-containing rubber, a silicone-series rubber, and a urethane-series rubber.

9. **(Original)** A composite dispersion according to claim 1, wherein at least the unvulcanized rubber of the resin and the unvulcanized rubber comprises at least one vulcanizing agent selected from the group consisting of a radical-generating agent and a sulfur.

10. **(Original)** A composite dispersion according to claim 9, wherein the radical-generating agent comprises at least one member selected from the group consisting of an organic peroxide, an azo compound, and a sulfur-containing organic compound.

11. **(Original)** A composite dispersion according to claim 9, wherein the proportion of the vulcanizing agent is 0.1 to 10 parts by weight relative to 100 parts by weight of the unvulcanized rubber.

12. **(Canceled)**

13. **(Original)** A composite dispersion according to claim 1, wherein the proportion of the vulcanization-activating agent is 0.1 to 10 parts by weight relative to 100 parts by weight of the resin.

14. **(Original)** A composite dispersion according to claim 1, wherein at least one component selected from the group consisting of the resin and the unvulcanized rubber contains a polyalkenylene.

15. **(Original)** A composite dispersion according to claim 14, wherein the proportion of the polyalkenylene is 1 to 30 parts by weight relative to 100 parts by weight of the resin or the unvulcanized rubber.

16. **(Currently Amended)** A composite dispersion which comprises:

a continuous phase comprising a resin[[,]]; and

a dispersed phase being directly bonded to the continuous phase and comprising a vulcanized rubber formed by vulcanizing an unvulcanized rubber,

wherein the continuous phase and the dispersed phase form an islands-in-an ocean structure, and a combination of the resin and/or the unvulcanized rubber is any one of the following combinations (a) to (d):

(a) a combination of a resin, and an unvulcanized rubber containing a vulcanizing agent and a vulcanization-activating agent,

wherein the weight ratio of the vulcanizing agent relative to the vulcanization-activating agent [the former/the latter] is 2/98 to 70/30, and

the vulcanization-activating agent comprises at least one member selected from the group consisting of an organic compound having at least two polymerizable unsaturated bonds per molecule, and a maleimide-series compound;

(b) a combination of a polyamide-series resin, and an unvulcanized rubber containing a vulcanizing agent and a polyalkenylene, wherein the weight ratio of the vulcanizing agent relative to the polyalkenylene [the former/the latter] is 2/98 to 45/55;

(c) a combination of a resin and a silicone-series unvulcanized rubber; and

(d) a combination of a polyphenylene ether-series resin containing a polyalkenylene, and an unvulcanized rubber containing a sulfur or a sulfur-containing organic compound as a vulcanizing agent.

17. **(Currently Amended)** A composite dispersion according to claim 16, wherein the resin has at least two atoms on the average per molecule, and each of the atoms is selected from a hydrogen atom and/or a sulfur atom and has the orbital interaction energy coefficient S ~~recited in claim 7~~ of not less than 0.006,

wherein the orbital interaction energy coefficient S is represented by the following formula (1):

$$S=(C_{HOMO,n})^2/|Ec-EHOMO,n|+(C_{LUMO,n})^2/|E_c-E_{LUMO,n}| \quad (1)$$

in the formula, each of E_c, $C_{HOMO,n}$, $E_{HOMO,n}$, $C_{LUMO,n}$, and $E_{LUMO,n}$ represents a value calculated by a semiempirical molecular orbital method MOPACPM3, E_c representing an orbital energy (eV) of a radical of a radical-generating agent, $C_{HOMO,n}$ representing a molecular-orbital coefficient of the highest occupied molecular orbital (HOMO) of an n-th hydrogen atom and/or sulfur atom constituting a basic unit of the resin, $E_{HOMO,n}$ representing an orbital energy (eV) of the HOMO, $C_{LUMO,n}$ representing a molecular-orbital coefficient of the lowest unoccupied

molecular orbital (LUMO) of the n-th hydrogen atom and/or sulfur atom constituting the basic unit of the resin, and $E_{LUMO,n}$ representing an orbital energy (eV) of the LUMO.

18. **(Original)** A composite dispersion according to claim 16, wherein the unvulcanized rubber contains a vulcanization-activating agent.

19. **(Original)** A composite dispersion according to claim 16, wherein the unvulcanized rubber contains a polyalkenylene.

20. **(Currently Amended)** A composite dispersion according to claim 1 or 16, wherein the resin and/or the unvulcanized rubber has a molecular weight of not more than 1000, and comprises at least one member selected from the group consisting of the following compounds:
(I) a compound having two hydrogen atoms on the average per molecule, each atom having the orbital interaction energy coefficient S ~~recited in claim 7~~ of not less than 0.006,

wherein the orbital interaction energy coefficient S is represented by the following formula (1):

$$S=(C_{HOMO,n})^2/|Ec-EHOMO,n|+(C_{LUMO,n})^2/|E_c-E_{LUMO,n}| \quad (1)$$

in the formula, each of E_c, $C_{HOMO,n}$, $E_{HOMO,n}$, $C_{LUMO,n}$, and $E_{LUMO,n}$ represents a value calculated by a semiempirical molecular orbital method MOPACPM3, E_c representing an orbital energy (eV) of a radical of a radical-generating agent, $C_{HOMO,n}$ representing a molecular-orbital coefficient of the highest occupied molecular orbital (HOMO) of an n-th hydrogen atom and/or sulfur atom constituting a basic unit of the resin, $E_{HOMO,n}$ representing an orbital energy

(eV) of the HOMO, $C_{LUMO,n}$ representing a molecular-orbital coefficient of the lowest unoccupied molecular orbital (LUMO) of the n-th hydrogen atom and/or sulfur atom constituting the basic unit of the resin, and $E_{LUMO,n}$ representing an orbital energy (eV) of the LUMO;

(II) a compound having not less than one group selected from the group consisting of a carboxyl group, an acid anhydride group and an isocyanate group per molecule; and

(III) a silane coupling agent.

21. **(Canceled)**

22. **(Original)** A composite dispersion according to claim 1 or 16, wherein the weight ratio of the continuous phase relative to the dispersed phase [the continuous phase/the dispersed phase] is 25/75 to 98/2.

23. **(Original)** A process for producing a composite dispersion recited in claim 1 or 16, which comprises kneading a resin and an unvulcanized rubber to give the composite dispersion.

24. **(Original)** A shaped article which is formed from a composite dispersion recited in claim 1 or 16.